

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A receiver for a high speed transmission system for receiving a first signal ~~(B)~~ over a transmission path, said first signal ~~(B)~~ comprising a plurality of data symbols which are successively transmitted, in front of each ~~being of said plurality of data symbols~~ having a first prefix for avoiding an interference between said successively transmitted plurality of data symbols, said receiver comprising:

- means for generating ~~a second~~ a second prefix for each of said first prefix in front of each of said plurality of data symbols; and
- replacing means for replacing said first prefix, wherein by said second prefix, said second prefix respectively having a length longer than ~~that~~ the length of said first prefix to be replaced,

characterized by

- a buffer for buffering said first signal;
- a filter having a pass characteristic such that said first signal can pass comprising a first filter portion having a finite impulse response introducing zeros in the transfer function of said filter and a second filter portion having an infinite impulse response introducing poles in the transfer function of said filter;
- wherein said first filter portion is arranged in front of said replacing means with respect to said transmission path, and said second filter portion behind thereof.

2. (Currently Amended) A receiver according to claim 1, characterized by receiving a second signal ~~(A)~~ over said transmission path simultaneously with said first signal ~~(B)~~, said first signal and said second signal having different frequency bands, and said pass characteristic of said filter being such that said second signal ~~(A)~~ cannot pass said filter.

3. (Previously Presented) A receiver according to claim 1, characterized in that for a given data symbol, said second prefix is a part of said given data symbol.
4. (Currently Amended) A receiver according to claim 1, characterized by
 - said buffer comprising a first buffer portion and a second buffer portion;
 - a switching means for switching said transmission path to said first and second buffer portions such that successively transmitted ones of said plurality of data symbols are alternately buffered ~~in~~ into said first and second buffer portions.
5. (Currently Amended) A receiver according to claim 1, characterized in that, said means for generating a second prefix generates said second prefix with a length corresponding to a parameter derived from ~~a impulse response of said filter~~ said infinite impulse response of said second filter portion such that an interference of successive ones of said plurality of data symbols of said first signal ~~(B)~~ caused by transients of said filter is avoided.
6. (Previously Presented) A receiver according to claim 1, characterized in that said transmission path is a telephone line and said second signal is a telephone service or an ISDN service.
7. (Previously Presented) A modem including a receiver according to claim 1.
8. (Currently Amended) A method for receiving a signal ~~(B)~~ on a receiving side of a transmission system, said signal comprising data symbols and a first prefix in front of each of said data symbol ~~symbols~~ for avoiding an interference of successively transmitted data symbols, comprising the following steps:
 - receiving said signal on the receiving side;
 - buffering said received signal;
 - generating a second prefix for each of said first prefix in front of each of said data

symbols;

- replacing said first prefix by said second prefix, said second prefix having a length longer than ~~that~~ the length of said first prefix to be replaced;

- filtering said received signal, wherein said first prefix has been replaced by said second prefix, by means of a filter having a pass characteristic such that said received signal can pass, including firstly filtering said received signal with a first filter portion having a finite impulse response (FIR) introducing zeros in the transfer function of said filter before replacing said first prefix with said second prefix and secondly filtering said signal ~~(B)~~ wherein said first prefixes have been replaced by said second prefixes by means of a second filter portion having an infinite impulse response (IIR) including poles in the transfer function of said filter.

9. (Previously Presented) A method according to claim 8, characterized in that for a given data symbol, said second prefix is generated by using a part of said given data symbol.

10. (Currently Amended) A method according to claim 8, characterized in that said buffering of said received signal ~~(B)~~ is performed by switching said transmission path to a first buffer portion and a second buffer portion such that successively received data symbols are alternately stored in said first and second buffer portion.

11. (Currently Amended) A method according to claim 8, characterized in that said second prefix is generated with a length corresponding to a parameter derived from ~~an impulse response of said filter~~ said infinite impulse response of said second filter portion such that an interference of successive data symbols of said signal ~~(B)~~ caused by transients of said filter is avoided.